

Centre No.							Paper Reference				Surname	Initial(s)			
Candidate No.							1	3	8	0	/	4	H	Signature	

Paper Reference(s)

1380/4H

Edexcel GCSE

Mathematics (Linear) – 1380

Paper 4 (Calculator)

Fractions

Past Paper Questions

Arranged by Topic

Model Answers

Materials required for examination

Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.

Items included with question papers

Nil

Examiner's use only

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Team Leader's use only

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Instructions to Candidates

In the boxes above, write your centre number, candidate number, your surname, initials and signature.

Check that you have the correct question paper.

Answer ALL the questions. Write your answers in the spaces provided in this question paper.

You must NOT write on the formulae page.

Anything you write on the formulae page will gain NO credit.

If you need more space to complete your answer to any question, use additional answer sheets.

Information for Candidates

The marks for individual questions and the parts of questions are shown in round brackets: e.g. (2).

There are 26 questions in this question paper. The total mark for this paper is 100.

There are 24 pages in this question paper. Any blank pages are indicated.

Calculators may be used.

If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.

Advice to Candidates

Show all stages in any calculations.

Work steadily through the paper. Do not spend too long on one question.

If you cannot answer a question, leave it and attempt the next one.

Return at the end to those you have left out.

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Turn over

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Leave
blank

1. (a) Use your calculator to work out $\frac{4.7}{9.4 - 3.5}$

Write down all the figures on your calculator display.

.....0.7966101695..... (2)

- (b) Write these numbers in order of size.
Start with the smallest number.

0.82 $\frac{4}{5}$ 85% $\frac{2}{3}$ $\frac{7}{8}$
0.82 0.8 0.85 0.67 0.875

$\frac{2}{3}$ $\frac{4}{5}$
..... $\frac{2}{3}$ $\frac{4}{5}$ 0.82 85% 0.875..... (2)
(Total 4 marks)

Q1

2. The two-way table shows some information about students in Years 7, 8 and 9.

	Year 7	Year 8	Year 9	Total
Can swim	55	61	74	190
Cannot swim	33	17	10	60
Total	88	78	84	250

Complete the two-way table.

(Total 3 marks)

Q2

3. A concert ticket costs £45 plus a booking charge of 15%.

Work out the total cost of a concert ticket.

$$\frac{45}{1} \times \frac{15}{100}$$

$$\frac{27}{4} = 6\frac{3}{4} = 6.75$$

$$45 + 6.75 = £51.75$$

£ 51.75

Q3

(Total 3 marks)

4. A shop sells CDs and DVDs.

In one week the number of CDs sold and the number of DVDs sold were in the ratio 3:5
The total number of CDs and DVDs sold in the week was 728

Work out the number of CDs sold.

3 : 5 means there are 3 + 5 shares

$$728 \div 8 = 91$$

$$91 \times 3 = 273$$

..... 273 CDs

Q4

(Total 2 marks)

Leave
blank

5. Michael buys 3 cartons of milk.

The total cost of these 3 cartons of milk is £4.20

Work out the total cost of 7 of these cartons of milk.



3 cartons cost £4.20

1 carton costs $4.20 \div 3 = 1.4$

7 cartons cost $7 \times 1.4 = 9.8$

£ 9.80

(Total 3 marks)

6

6. Andy sells CDs

He sells each CD for £8.80 plus VAT at $17\frac{1}{2}\%$

He sells 650 CDs

Work out how much money Andy receives.

This is easily done on a simple calculator. Type in:

$8.8 \times 650 + 17.5\%$

The display shows 6721

£ 6721

(Total 4 marks)

7



7. Three boys shared £48 in the ratio 5:4:3

Daniel received the smallest amount.

- (a) Work out the amount Daniel received.

5:4:3 means there are $5 + 4 + 3$ shares

$$5 + 4 + 3 = 12$$

$$48 \div 12 = 4$$

$$3 \times 4 = 12$$

£ 12 (3)

A year ago, Daniel's height was 1.24 metres.

Daniel's height has now increased by 9.5%.

- (b) Work out Daniel's height now.

Give your answer to an appropriate degree of accuracy.

On your calculator type:

$$1.24 + 9.5\%$$

Display shows 1.3578

David's height was given to 2 decimal places

So 1.36 is appropriate.

.....1.36... m (4)

(Total marks)

Q14

8. A garage sells British cars and foreign cars.

The ratio of the number of British cars sold to the number of foreign cars sold is 2 : 7

The garage sells 45 cars in one week.

- (a) Work out the number of British cars the garage sold that week.

2:7 means there are 2 + 7 shares

$$2 + 7 = 9$$

$$45 \div 9 = 5$$

British cars got 2 shares

$$2 \times 5 = 10$$

..... 10 British cars

(2)

A car tyre costs £80 plus VAT at $17\frac{1}{2}\%$

- (b) Work out the total cost of the tyre.

On your calculator type:

$$80 + 17.5\%$$

Display 94

£ 94

(3)

The value of a new car is £12 000

The value of the car depreciates by 20% per year.

- (c) Work out the value of the car after 2 years.

On your calculator type:

$$12000 - 20\% - 20\%$$

Display 7680

£ 7680

(3)

(Total 8 marks)

Q8

9. There are some sweets in a bag.

18 of the sweets are toffees.

12 of the sweets are mints.

- (a) Write down the ratio of the number of toffees to the number of mints.
Give your ratio in its simplest form.

$$3 \cancel{18} : 12 \cancel{2}$$

cancel

$$\dots\dots\dots 3 : 2 \dots\dots\dots$$

(2)

There are some oranges and apples in a box.

The total number of oranges and apples is 54

The ratio of the number of oranges to the number of apples is 1 : 5

- (b) Work out the number of apples in the box.

1 : 5 means there are 1 + 5, or 6 shares

$$54 \div 6 = 9$$

$$5 \times 9 = 45$$

$$\dots\dots\dots 45 \text{ apples} \dots\dots\dots$$

(2)

(Total 4 marks)

Q9

10. Toby invested £4500 for 2 years in a savings account.
He was paid 4% per annum compound interest.

(a) How much did Toby have in his savings account after 2 years?

On your calculator type in:

$$4500 + 4\% + 4\%$$

Display 4867.2

or

$$4500 \times 1.04^2 = 4867.2$$

£4867.20.....
(3)

Jaspir invested £2400 for n years in a savings account.
He was paid 7.5% per annum compound interest.

At the end of the n years he had £3445.51 in the savings account.

(b) Work out the value of n .

$$2400 \times 1.075^n = 3445.51$$

Trial and Improvement

$$2400 \times 1.075^4 = 3205 \quad \text{Too small}$$

$$2400 \times 1.075^6 = 3703 \quad \text{Too big}$$

$$2400 \times 1.075^5 = 3445.51 \quad \text{Correct}$$

.....5.....
(2)

Q10

(Total 5 marks)

11. (a) Work out $\frac{2}{3} \div \frac{5}{6}$

Give your fraction in its simplest form.

$$\begin{aligned} & \frac{2}{3} \div \frac{5}{6} \\ &= \frac{2}{3} \times \frac{6}{5} \\ &= \frac{4}{5} \end{aligned}$$

$$\frac{4}{5}$$

(3)

(b) Work out $2\frac{1}{3} - 1\frac{2}{5}$

$$\begin{aligned} &= \frac{7}{3} - \frac{7}{5} \\ &= \frac{35 - 21}{15} \\ &= \frac{14}{15} \end{aligned}$$

$$\frac{14}{15}$$

(3)

Q11

(Total 6 marks)

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